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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,888	03/02/2002	Ron Naismith	SAA-0046-1	9721

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SCHNEIDER ELECTRIC / SQUARE D COMPANY  
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EXAMINER
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NGUYEN, DUSTIN

ART UNIT	PAPER NUMBER
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2154

MAIL DATE	DELIVERY MODE
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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/087,888	<b>Applicant(s)</b> NAISMITH ET AL.	
	<b>Examiner</b> DUSTIN NGUYEN	<b>Art Unit</b> 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. Claims 1-18 are presented for examination.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 7,032,029 [ hereinafter as '029 patent ]. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are claiming common subject matter as follow:

Taking claim 1 as an exemplary claim, the '029 patent contains the subject matter claimed in the instant application. As per claim 1, both applications are claiming common subject matter, as follows:

<u>Instant Application:</u>	<u>The '029 patent:</u>
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assigning a first address to a first node and a second address to a second node	providing a first and second programmable logic controller ..., assigning a network address identifier to each programmable logic controller ...;
wherein the first address is characteristic of a primary mode of operation;	placing the first programmable logic controller in primary mode ...;
initiating from the first node ...;	
initiating from the second node ...;	
identifying the second device ...;	
identifying the first device ...	
determining that the first node is inoperable; initiating at the second node an exchange ...; and assigning the first address to the second node ....	exchanging the network address identifiers between the first programmable logic controller and the second programmable logic controller upon detection of a failure ....

The claim of '029 patent does not specifically disclose the steps of initiating the first and second communication commands and identifying the devices as peer devices as described in the claim 1 of instant application, however, Borella et al. [ US Patent No 6,269,099 ] discloses a method steps for discovering peer devices, wherein a first peer network device to send out a peer discovery request to other peer network devices, and once a second peer network device receives a peer discovery request, the second peer network device attempts to establish a two-way, peer-to-peer data-flow to the first peer network device [ Figures 4A and 4B; Abstract; and col 6, lines

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61-col 7, lines 35 ], it would have been obvious to a person skill in the art at the time the invention was made to incorporate the teaching of Borella because the teaching of Borella on peer discovery would enhance performance, reliability and security of data transmitted over the Internet to and from other computer networks [ Borella, Abstract ].

As per independent claim 9, it is also directed to the same subject matter recited in claim 1 above. Accordingly, they are rejected under the judicially created doctrine of obviousness-type double patenting.

As per dependent claims 2-8 and 10-18, they are depending on rejected claims, they are rejected under the judicially created doctrine of obviousness-type double patenting.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 5-7, 9-11, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coile et al. [ US Patent No 6,108,300 ], in view of Borella et al. [ US Patent No 6,269,099 ].

6. As per claim 1, Coile discloses the invention as claimed including a method comprising the steps of:

assigning a first address to a first node [ i.e. server A adopted the active IP and MAC addresses ] [ Figure 3; and col 5, lines 18-20 ] and a second address to a second node [ i.e. server B adopted the standby IP and MAC addresses ] [ Figure 3; and col 5, lines 31-34 ], wherein the first address is characteristic of a primary mode of operation [ i.e. primary server ] [ Figure 3; and col 5, lines 25-32 ];

determining that the first node is inoperable [ i.e. detect that the primary network device has failed ] [ 810, Figure 8; Abstract; and col 6, lines 60-67 ];

initiating at the second node an exchange of the first address and the second address responsive to determining that the first node is inoperable [ i.e. the standby device detects the failure of the active device, the standby device notifies the active device ] [ 820, Figure 8; col 10, lines 46-49; and col 12, lines 10-23 ]; and

assigning the first address to the second node and the second address to the first node responsive to initiating the exchange [ i.e. change or trade IP and MAC addresses ] [ 830, col 10, lines 33-42; col 12, lines 15-19; and col 13, lines 52-64 ].

Coile does not specifically disclose

initiating from the first node a first communications command in a peer protocol format addressed to the second node;

initiating from the second node a second communications command in the peer protocol format addressed to the first node;

identifying the second device on the second node as a peer device within the first device on the first node responsive to receiving the second communications command at the first node; and

identifying the first device on the first node as a peer device within the second device on the second node responsive to receiving the first communications command at the second node.

Borella discloses

initiating from the first node a first communications command in a peer protocol format addressed to the second node [ i.e. transmitting the TCP/IP SYN segment from first device to second device ] [ Figure 4A; and col 6, lines 61-col 7, lines 17 ];

initiating from the second node a second communications command in the peer protocol format addressed to the first node [ i.e. second network device responds to the first network device with TCP/IP SYN ACKnowledgment segment ] [ Figure 4B; and col 7, lines 17-24 ];

identifying the second device on the second node as a peer device within the first device on the first node responsive to receiving the second communication command at the first node [ i.e. addresses of first and second network device ] [ Figure 4A; and col 7, lines 9-17 ]; and

identifying the first device on the first node as a peer device within the second device on the second node responsive to receiving the first communication command at the second node [ i.e. reversed of addresses ] [ Figure 4B; and col 7, lines 9-24 ];

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Coile and Borella because the teaching of Borella on discovering peer devices would enhance performance, reliability and security of data transmitted over the Internet to and from other computer networks [ Borella, Abstract ].

7. As per claim 5, Coile discloses wherein the standard communications network is Ethernet [ col 6, lines 1-4 ].

8. As per claim 6, Borella discloses the step of: after initiating from the first node a first communications command in a peer protocol format to the second node, responding to the first communications command from the second node to the first node [ i.e. after sending the TCP/IP ACK segment, a TCP connection is established between device and TCP data can then be exchanged ] [ col 7, lines 29-35 ].

9. As per claim 7, Borella discloses the step of: after initiating from the second node the second communications command in the peer protocol format to the first node, responding to the second communications command from the first node to the second node [ i.e. after sending the TCP/IP ACK segment, a TCP connection is established between device and TCP data can then be exchanged ] [ col 7, lines 29-35 ].

10. As per claim 9, it is rejected for similar reasons as stated above in claim 1. Furthermore, Borella discloses a receptor for receiving from the second node a second communications command in the peer protocol format, in response to the first communications command [ i.e. first network device responds to TCP/IP SYN ACK segment with TCP/IP ACK segment ] [ Figure 4C; and col 7, lines 24-28 ].

11. As per claim 10, Borella discloses a scan table for storing parameters relating to the devices, the scanner using one or more of the parameters for scanning the devices [ Figures 8A and 8B; and col 9, lines 6-24 ].



12. As per claim 11, it is rejected for similar reasons as stated above in claim 1.

13. As per claim 15, it is rejected for similar reasons as stated above in claim 5.

14. As per claims 16 and 17, they are rejected for similar reasons as stated above in claims 6 and 7.

15. Claims 2-4, 8, 12-14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coile et al. [ US Patent No 6,108,300 ], in view of Borella et al. [ US Patent No 6,269,099 ], and further in view of Ruckley et al. [ US Patent No 6,360,277 ].

16. As per claim 2, Coile and Borella do not specifically disclose wherein the peer protocol format is a programmable logic controller (PLC) format. Ruckley discloses wherein the peer protocol format is a programmable logic controller (PLC) format [ col 1, lines 36-38 and lines 61-64 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Coile, Borella and Ruckley because Ruckley's teaching of PLC would provide to simplify the installation and maintenance of industrial process control systems [ Ruckley, col 2, lines 23-26 ].

17. As per claim 3, Ruckley discloses wherein the peer device is a programmable logic

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controller (PLC) device [ col 1, lines 36-38 and lines 61-64 ].

18. As per claim 4, Ruckley discloses wherein the peer protocol format is Modbus [ Figure 2; and col 3, lines 5-14 ].

19. As per claim 8, Coile and Borella do not specifically disclose the steps of: setting the first node to an active status; and, setting the second node to a passive status. Ruckley discloses the steps of: setting the first node to an active status; and, setting the second node to a passive status [ col 3, lines 49-61 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Coile, Borella and Ruckley because Ruckley's teaching would allow to decentralize digital controllers to be networked together from the field level to the cell level [ Ruckley, col 3, lines 45-48 ]

20. As per claims 12-14, they are rejected for similar reasons as stated above in claims 2-4.

21. As per claim 18, it is rejected for similar reasons as stated above in claim 8.

22. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dustin Nguyen/  
Primary Examiner, Art Unit 2154